Jon Ruffin

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Data Analyst/aspiring Data Scientist with over 4 years of experience in field using Python, R, SQL, and ArcGIS. Areas of experience include weather patterns, power usage, and food contaminate anomaly detection.

SKILLS

- Platforms: Windows, Linux
- Languages: Python, R, SQL, HTML/CSS/PHP, JavaScript, UNIX shell
- Tools: Wolfram Mathematica, ArcGIS, VisualStudio, Git, D3, Drupal, full MS Office suite, Prezi
- Able to professionally prepare and deliver complex reports to any audience
- Advanced statistical analysis on data from multiple sources
- Data analysis techniques including machine learning, linear regression, neural networks, support vector machines, anomaly detection, clustering, random forest
- Data visualization and manipulation for the purposes of both communication and pattern recognition, see portfolio.ctcii.com/hurricanes for an example of my work
- Highly motivated, quick learner, excellent on-the-job training skills, able to work independently or with others, neat and professional

PUBLICATIONS

Juers, D. H. & Ruffin, J. (2014). MAP_CHANNELS: a computation tool to aid in the visualization and characterization of solvent channels in macromolecular crystals. *Journal of Applied Crystallography. 47*(6), 2105-2108. doi: 10.1107/S160057671402281X

EXPERIENCE

3/2016 – 8/2016 **Eugene Water and Electric Board** **Eugene, OR**

Customer Research Intern

- Compiled, cleaned, and analyzed commercial and residential customer water and electric meter data as part of EWEB's Advanced Metering Modernization program
- Advised the public affairs team on creating targeted communications for potential "smart" meter opt-in customers based on data usage patterns
- Used Python, R, ArcGIS, SQL, Excel

5/2014 – 3/2016 **Physics Lab, University of Oregon** **Eugene, OR**

Research Assistant

- Assisted in construction and testing of JEOL scanning electron microscope
- Compiled, cleaned, analyzed, and modeled hurricane data from the NHC database to visualize patterns and predict hurricane development and movement
- Used Python, HTML/CSS/PHP, JavaScript, D3

9/2013 – 12/2015 **University of Oregon** **Eugene, OR**

Graduate Teaching Fellow

- Taught first and second year physics lab courses, held office hours, and graded assignments and tests
- Assisted in planning and setting up experiments and instructed students in problem solving techniques

5/2013 – 9/2013 **Key Technology Inc.** **Walla Walla, WA**

Research and Development Intern

- Initiated project for using thermal reflections to identify bits of glass in food, presented proposal to committee for funding
- Published report with supervisor demonstrating effectiveness of new methods for aligning laser scanners in field
- Analyzed scanner and camera data using both Excel and image analysis software to determine problems with misalignment and detection

5/2012 – 5/2013 **Biophysics Lab, Whitman College** **Walla Walla, WA**

Research Assistant

- Wrote a graphical user interface in Python for a Fortran program to be accessed from COOT (see publication)
- Conducted independent experiment investigating the thermal contraction of different cryoprotectants when cooled with liquid nitrogen
- Presented poster of findings at the Whitman College Undergraduate Conference and separately to Whitman College Board of Trustees

EDUCATION

2015	MS Physics	University of Oregon	Eugene, OR
2013	BA Physics	Math Minor, Whitman College	Walla Walla, WA